

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Previously, claims 3-7, 14-16, 19-29, and 36-38 were withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention; claims 41 and 42 were added as new claims; and claims 12 and 34 were allowed. Presently, claims 1 and 30 are amended. Thus, claims 1, 2, 8-11 and 13, 17, 18, 31-35 and 39-42 are presently pending and under consideration.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Response to Claim Rejections:

Claims 1, 2, 8-11, 13, 17, 18, 30-33, 35, and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US 6,809,899).

With regard to the rejection of claim 1, this rejection is respectfully traversed.

Claim 1 as amended, defines a read/write head for a disk drive with the recited features, in which a shield is located between the write element and the magnetoresistive sensor, wherein the distance between the write pole tip and the substrate is less than the distance between the shield and the substrate.

An example of a read/write head in which a shield is located between the write element and the magnetoresistive sensor; and wherein the distance between the write pole tip and the substrate is less than the distance between the shield to the substrate, is shown in Figure 2 of the present application. As shown, the shield (60) is located between the write element (68) and the

sensor (64). In addition, the shield (60) is farther from the substrate (52) than the write pole tip (68) is from the substrate (52).

Chen neither teaches nor suggests a structure in which a shield is between the write element and the magnetoresistive sensor; and wherein the distance between the write pole tip and the substrate is less than the distance between the shield to the substrate. Instead, as shown in Chen's Figure 5, first there are no shields between the write pole tip (108), and the magnetoresistive sensor (122).

The Examiner characterizes Chen's "soft magnetic coupling layer" (118) as a write shield. However, Chen's write pole tip (108) is farther from the substrate than the distance from the layer (118) to the substrate. Accordingly, Chen's layer (118) does not meet or suggest a read/write head in which "the distance between the write pole tip and the substrate is less than the distance between the shield and the substrate" (emphasis added) as recited in claim 1. Furthermore, it is noted that Chen does not refer to the layer (118) as a write shield, but, instead, describes that layer as a soft magnetic coupling layer.

In addition, Chen describes that write pole layer 105, along with the layer 125, as shielding the MR sensor 122 from magnetic flux. (Chen, col. 3, ll. 52-56.) By defining the write pole layer (105) as the shielding layer, there would be no difference between the distance between the write pole layer (105) and the substrate and the shield (also write pole (105)) and the substrate. Accordingly, Chen's write pole layer (105) does not meet or suggest a read/write head in which "the distance between the write pole tip and the substrate is less than the distance between the shield and the substrate" (emphasis added) as recited in claim 1.

Furthermore, while the Examiner refers to Chen's part 113 as a "write pole," the Chen patent actually describes part 113 as a "return pole layer." Chen's configuration (shown in Chen's Figs. 4 and 5) involves a substrate, followed by a shared shield/return path structure (Chen's 113/115 structure) and then followed by a write pole (105/108). In that configuration, the distance between the write pole (105/108) and the substrate must be greater than the distance

between the shared shield/return path (113/115) and the substrate. In contrast, the structure shown in Fig. 2 of the present application involves a substrate (52), then a write pole tip (68) and then a shield (60) (i.e., the distance between the write pole tip and the substrate is less than the distance between the shield and the substrate as recited in claim 1).

The rejection of claims 2, 8-11, 13, 17, 18, and 41 is also respectfully traversed. These claims as amended each are dependent on the amended claim 1, and as such they are patentable over Chen, at least for the same reasons explained above with respect to claim 1.

Accordingly, the rejection of claims 1, 2, 8-11, 13, 17, 18, and 41 under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US 6,809,899) is respectfully traversed.

With regard to claim 30 as amended this rejection is respectfully traversed.

Claim 30 as amended defines a read/write head for a disk drive with the recited features, in which the distance between the write pole tip and the substrate is less than the distance between the write shield and the substrate, the first read shield and the substrate, and the second read shield and the substrate.

An example of a read/write heads in which the write pole tip is closer to the substrate than all of the shields is shown in Figure 3 of the present application, wherein the shields (92), (94) and (98) are all farther from the substrate (104) than the write pole tip (106) is from the substrate (104). In other words, all of the three shields (92, 94 and 96) are further from the substrate than the distance between the write pole tip and the substrate.

Consistent with the above discussion, Chen neither teaches nor suggests a structure in which a shield is further from the substrate than the distance between the write pole tip and the substrate. In that regard, Chen certainly does not teach or suggest a read/write head in which a write shield and first and second read shields are each further from the substrate than the distance between a write pole tip and the substrate. Furthermore, Chen does not disclose or suggest the

three shields (i.e., a write shield and first and second read shields). Therefore, claim 30 as amended is patentable over Chen.

The rejection of claims 31-33, 35, 39-40, and 42 is also respectfully traversed. These claims each are dependent on the amended claim 30, and as such they are patentable over Chen, at least for the same reasons explained above with respect to claim 30.

Accordingly, the rejection of claims 30-33, 35, 39-40, and 42 under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US 6,809,899) is respectfully traversed.

Concluding Remarks:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

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